KUBOTA

Table Top Centrifuge

8420

This table-top centrifuge can hold 80 x 10mL blood collecting tubes /15mL, or 4 x 750mL bottles.
Turn the knob for quick setting.
A shield cover is available for safe centrifuging of biohazardous materials.

A clip-on shield cover, effective for biohazardous materials, is available for the RS-3012 and RS-730 swinging bucket rotors.

Sample balance can be measured by eye.
(for rotors used at 4,000rpm or less)

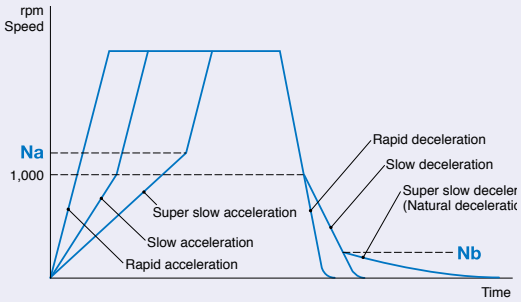
Complies with GMP requirements
Equipped with a tachometer port, in compliance with GMP requirements.
Actual rotor speed is easy to check.

Less sample temperature increase during centrifuging
Our special one-way cooling system for intake and evacuation of air minimises sample temperature increases during centrifuging.

Numerous detectors ensure safe, reliable operations. If trouble is detected, operation stops immediately.
- Sensors for imbalance, open lid and circuit breaker are incorporated.

Easy-to-use functions maximise convenience
- 5 available memory settings, with one-key save and recall operation.
- Operation according to centrifugal force (xg), stepped centrifuging and integral centrifuging (g·sec) are all easy to select and set.
- Acceleration and deceleration curve can be varied in 3 steps to best meet sample and experimental requirements.
- Acceleration and deceleration speeds can be customised for reliable centrifugation of resuspension-prone samples.

Acceleration and deceleration characteristics
Acceleration and deceleration curves can be varied in three steps according to the type of sample and experimental conditions. Acceleration and/or deceleration commencement speed can be selected for the sample easy to stir.



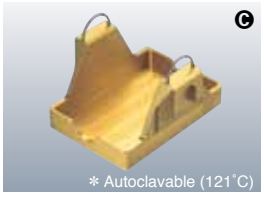
- For the super slow acceleration and the super slow deceleration, a characteristic change-over speed Na and Nb can be set from 0 to 6,000 rpm.
- Natural deceleration starts at the change-over speed Nb.

Table with casters, for mounting model 8420
Code No.047-3810
Includes convenient storage space, and can be locked in position.
55(W) x 60(D) x 46(H) cm

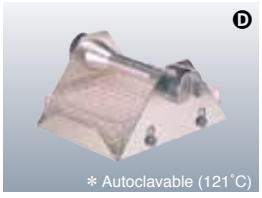
＊ Autoclave parameters should not be exceeded. Refer to the Operation and Service Manual.

RS-3012
Swinging bucket rotor
Bucket (Code No.053-5310, optional)
Shield cover (Code No.027-9210, optional)
A secure clip system lets you easily attach and remove the shield covers.

Bucket Code No.053-5180
(Optional)
Maximum capacity is 4 x 750mL bottles. Various tube racks can be used.



Bucket Code No.053-5220
(Optional)
Accepts 8 micro-plates and 4 deep-well plates. This bucket has no center bar so plates can be easily removed.



Bucket Code No.053-5170
(Optional)
Accepts 8 micro-plates and 8 tissue culture plates.

Rotor, Bucket, Tube Rack for Model 8420

Rotor Name		Nominal Capacity	Tube size (mm) diam. x length *1	Maximum Speed rpm	Maximum RCF xg	Bucket Code No.	Tube Rack Adaptor Code No.
Swinging Bucket Rotor							
RS-3012	Ⓐ	140 x 6mL/RIA tube	10~12.3 x 65~100 (95)	3,300	2,150 *2	053-5310	055-5830
		80 x 5~7mL blood collecting tube *3	12~13.3 x 63~110 (105)		2,280		055-5000
		100 x 10mL	12~14.2 x 76~110 (105)		2,280		055-5840
		80 (64) x 15mL	15~17.2 x 76~110 (105)		2,280		055-5850
		80 (64) x 5~10mL blood collecting tube/15mL *4	12~17.2 x 72~110 (105)		2,280		055-0900
		16 x 15/50mL (glass)	15mL 15~17.2 x 75~135(125) 50mL 27~36 x 79~115(110)		2,280		055-5860
		48 x 15mL Conical tube	17 x 121 (121)		2,280		055-4660
		24 x 50mL Conical tube	30 x 117 (117)		2,280		055-4610 *5
		8 x 100mL	38~46.5 x 75~120 (116)		2,280		055-5870
		4 x 250mL *6, 7	60~61.8 x 100~141 (136)		2,280		055-6880
		4 x 350mL	65~71 x 100~130 (122)		2,280		055-6890
		12x/16x/20x Self-Standing sputum tube *8	cap diam. φ42/φ39/φ31		*8		*8
	Ⓑ	72 x 10mL blood collecting tube/15mL	15~17.2 x 75~110	3,300	2,280	053-5180	055-0210
		16 x 50mL (glass)	27~36.8 x 79~114		2,280		055-0240
		48 x 15mL Conical tube	17 x 121		2,280		055-0220
		16 x 50mL Conical tube	30 x 117		2,280		055-0230 *5
		4 x 250mL *6, 7	60~61.8 x 100~141		2,280		055-4490
		4 x 350mL	65~71 x 100~130		2,280		055-5880
		4 x 500mL Conical tube *9	96 x 147		2,280		431124 *9
		4 x 500mL bottle/650mL stainless bottle *10	84~86 x 100~125		2,280		055-5890
		4 x 650/750mL *11	95~98 x 100~136		2,340 *2		—
	Ⓒ	8 x Micro-plates *12	88(W) x 134(D) x 50(H)	3,300	2,020 *2	053-5220	—
		4 x Deep-well plates *12					
	Ⓓ	8 x Micro-plates *12	92(W) x 133(D) x 36(H)	2,000	770 *2	053-5170	055-5900
		8 x Culture plates *12					—
RS-730 *13	Ⓔ	80 x RIA tube	12 x 75~110	4,000	3,260	K13215	K18005
		48 x 5~7mL blood collecting tube	12.5~13 x 75~106		3,260		K18012
		48 x 15mL *14	15.5~17 x 96~115		3,260		K18015
		16 x 15mL Conical tube *15	16.5 x 120.6		3,260		K18016
		8 x 50mL Conical tube *16	29.5 x 117		3,260		K18052
		28 x 50mL Conical tube	29.5 x 117		3,400 *2	K13235	—
	Ⓕ	12 x Micro-plates *12	86(W) x 130(D) x 49(H)		2,880 *2	K13220	—
		4 x Deep-well plates *12					
Plate Rotor							
PT-89		8 x Micro-plates *12	86(W) x 130(D) x 89(H)	2,400	1,080	Equipped with rotor	055-6370 *17
		4 x Deep-well plates *12					
Fixed-angle Rotor							
RA-410M3		8 x 12mL (Plastic) *18	15.8~16.5 x 97~120	6,000	4,670 *2	—	055-1120
		8 x 14mL *19	17 x 100		4,550 *2		055-0550
		8 x 15mL Conical tube	17 x 121		4,750 *2		055-1280
		8 x 50mL (Plastic) *20	26.4~28.7 x 98~115		4,630 *2		055-1110
		8 x 50mL Conical tube	30 x 117		4,830		—
	Sartorius	Vivaspin 2	16.7 x 129		4,750 *2		055-1280
		Vivaspin 6					
		Vivaspin 20	30 x 117		4,830		—
	Millipore	Amicon Ultra Free-CL	16.3 x 77		3,980 *2		055-1330
		Amicon Ultra-4	17 x 129		4,750 *2		055-1280
		Amicon Ultra-15	30 x 121		4,830		—

*1 Figures in parentheses indicate speeds when using optional shield covers (No.027-9210).
*2 For centrifugal force indications, please refer to the instruction manual.
*3 5-7mL blood collecting tubes made by SEKISUI (Insepack Ⅱ), Termo (Venoject Ⅱ), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used. Tubes for flow cytometry can also be used.
*4 5-10mL blood collecting tubes made by SEKISUI (Insepack Ⅱ), Termo (Venoject Ⅱ), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used. Tubes for flow cytometry can also be used.
*5 15mL conical tubes can be centrifuged if adaptors are used (Code No.055-1280).
*6 175mL, 200mL and 225mL conical tubes can be centrifuged if cushions are used.
Cushions (Catalogue No.352090) must be used with 175 & 225mL conical tubes made by BD Falcon (Catalogue No.352076 & No.352075).
Cushions (Catalogue No.377585) must be used with Nunc 200mL bottles (No.376813).
*7 Nalgene and Herolab 250mL flat bottom bottles can be used.
*8 Various sputum tube capacities can be used. Contact our distributor for details.
*9 Conical tubes made by Corning (Catalogue No.431123) require Cushions (Catalogue No.431124).
*10 500mL bottles (Code No.K15501C/PPCO) can be used.
*11 Herolab bottles, 650mL (Catalogue No.253591, PP) and Beckman bottles, 750mL (Catalogue No.356855).
*12 Verify plate strength before centrifuging. Plates in lower position may fracture.
*13 Contact our distributor when the RS-730 rotor is to be used at 4,000rpm because a special type is required. In such cases, be sure to contact our distributor before attempting to use swinging rotors and plate rotors.
*14 When using shield covers, tubes cannot be positioned in the bucket corners, which reduces the maximum number of tubes that can be used for each bucket. For example, when using 15mL glass tubes with the K13215 bucket, the max number of tubes will be 32, not 36.
*15 15mL conical tubes made by Greiner, Corning, Sarstedt, BD Falcon, Thermo Fisher and Nalgene can be used with shield covers.
*16 50mL conical tubes made by Greiner, Sarstedt, Labcon can be used with shield covers.
*17 Facilitates removing plates from buckets.
*18 Nalgene tubes, No.3110-0120 and No.3117-0120.
*19 BD Falcon tubes, No.352006, No.352018 and No.352059.
*20 Nalgene tubes, No.3110-0500, No.3110-9500 and No.3117-9500.

* Autoclave parameters should not be exceeded. Refer to the Operation and Service Manual.

RS-730
Swinging bucket rotor
Bucket (Code No.K13215, optional)

Shield cover (Code No.K17112)
(Optional)
Shield cover for K13215
A secure clip system lets you easily attach and remove the shield covers.

Bucket Code No.K13220
(Optional)
Accepts 12 micro-plates and 4 deep-well plates.

PT-89
Plate rotor
(Optional)
Accepts 8 micro-plates or 4 deep-well plates.

RA-410M3
Fixed-angle rotor
8 x 50/15mL conical tubes
This multipurpose fixed-angle rotor accepts 12mL or 50mL tubes.
Lid (Code No.028-1260) is optional.

Specifications

Model 8420

Maximum Speed	6,000 rpm
Maximum RCF	4,830 xg
Maximum capacity	3,000 mL
Control system	Micro-processor control (brushless motor) Speed, RCF(g), Time, g·sec, Acceleration and Deceleration, 5 memory banks
Alarm display	Lid open, Imbalance, Over speed, Detected electrical abnormality in motor, inverter, lid interlock, speed sensor
Acceleration/Deceleration	Three selectable rates; Rapid, Slow and Super Slow
Speed setting and indication	Digital display, 10 rpm increments
RCF setting and indication	Digital display, 10 xg increments
Integrator setting and indication	Digital display, from 1.00 - 9.99 x 10^9 g·sec
Stepped centrifugal	speed, RCF(g), time, acceleration and deceleration, 1 memory bank
Timer setting and indication	Digital display, with HOLD function (continuous operation) and electric buzzer 1 second to 100 seconds, 1 sec increments 100 seconds to 990 seconds, 10 sec increments 1 minute to 100 minutes, 1 min increments 100 minutes to 990 minutes, 10 min increments
Power requirements	Single phase 50/60 Hz, 110V±10%, 115V±10% 15A Single phase 50/60 Hz, 220V±10%, 230V±10% 8A
Rated voltage and rated current	110/115V 9.1A, 220/230V 4.7A
Power consumption and heat output	560W 2.0 MJ/h
Dimensions, weight	53(W) x 62(D) x 37(H) cm(*1), 62kg
Certificates of conformity	IEC 61010-2-020 CE Marking (220/230V)

(*1) Not including projections.
All specifications and external appearance are subject to change without notice.
* Use only rotors, adaptors and tube racks made by KUBOTA. Do not attempt to use rotors, adaptors or tube racks made by other manufacturers.
* Follow all instructions in the relevant Instruction & Service Manual when operating centrifuges.

Kubota has acquired ISO 9001 and ISO 13485 certification.

NOTE

Products in this catalogue are designed for use by people having the requisite technical knowledge, and must always be used with care. People who do not have adequate technical knowledge or training should use our products only under appropriate supervision, or else hazards are likely to occur.

DISCONTINUE USE INDICATIONS

Always discontinue use if any of the conditions listed at right are evident.

- The rotor or bucket appears to be damaged or corroded.
- The defined lifetime of the rotor expires.
- The equipment emits a burnt smell.
- You receive a minor electric shock when you touch the equipment with your bare hand.
- Any other abnormality or indication of failure is noticed.

IMPORTANT

In the event of any observed abnormality in the equipment or its parts, to prevent occurrence of functional failure or accidents, immediately turn off the power switch, disconnect the power cable plug from the mains socket and contact your local distributor or Kubota Corporation if there is no local distributor in your neighbourhood.

Safety Precautions

For your safe use of the equipment, be sure to read the instruction manual carefully before you start operations.

Do not misplace the instruction manual. Keep the instruction manual nearby so you can refer to it whenever necessary.

- Spare parts for repair are typically available for a period of 10 years after production is discontinued (except when spare parts cannot be procured).
- This catalogue is not for distribution in the USA, Canada or Mexico, as the products shown are not for sale in these countries.

KUBOTA CORPORATION

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